## Required Predesign Conferences for High-rise Structures and Buildings with an Atrium

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A predesign conference amongst the staff of the Department of Planning and Development (DPD), the Seattle Fire Department, and the project design team is required by Section 403 and Section 404 of the Seattle Building Code for all buildings classified as high-rise structures and for buildings with an atrium. Required predesign conferences are designed to identify and resolve potential major code problems before they surface during the plan review phase of the permit process.

A high-rise structure is defined as one with floors used for human occupancy more than 75 feet above the lowest Fire Department vehicle access, or with floors used for human occupancy 35 feet above grade which lack Fire Department vehicle access to at least one side.

An atrium is a feature in a building that interconnects three or more floors by architectural openings in two or more successive floors.

This Client Assistance Memo (CAM) explains the preliminary nature of the predesign conference and outlines the process of preparing for the conference, the submittal requirements, and the relationship of the conference to the subsequent permit process.

## **Preliminary Nature of Conference**

Applicants must be aware that agreements reached with the City in the course of the predesign conference are preliminary in nature. They are based on a quick overview of schematic drawings. Code alternates or interpretations which are discussed at the conference must be documented in the applicant's minutes of the meeting.

A general concept approval will not substitute for plan review of an issue unless the issue has been documented in the minutes as a code alternate or interpretation that has been agreed to by both parties.

## **Scheduling**

A predesign conference with DPD and the Fire Department may be scheduled within two weeks after the required information from the application is submitted to the City. The conference must take place at least 60 days before the application for a building permit is submitted.

To initiate the process of scheduling your predesign conference, please call (206) 684-8850. You will also find it helpful to read CAM 318, Building Code Predesign/Code Interpretation Conferences, available online at **www.seattle.gov/dpd/publications** and at our Public Resource Center (located on the 20th floor of Seattle Municipal Tower at 700 Fifth Ave.)

## **Preliminary Submittals**

Prior to the predesign meeting the applicant must submit the following basic application information in writing:

- 1. Property address
- 2. Square foot area of each occupancy
- 3. Number of stories and basements
- 4. Associated DPD MUP project numbers

The applicant also must submit two sets of schematic drawings and two copies of a written Section 403 (high-rise) and/or 404 (atrium) proposal to the Principal Engineer. These will aid DPD staff, the Fire Department, and the design team by facilitating identification, discussion, and resolution of important issues.

In general, the drawings must be complete enough to schematically show complete exit paths, elevator locations, tenant spaces vs. required public corridors, location of generators, pressurization equipment, and the fire control center. Typical floor plans, building elevations, and sections through unusual configurations are also required.

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In addition, any code alternate or interpretation the design team is aware of must be requested in writing.

## **Predesign Fee**

Applicants are required to pay 35 percent of the plan review fee at the beginning of the predesign conference. The fee will be calculated based on the value of the construction as regulated by the DPD Fee Subtitle, which can be found on DPD's "Fees" page at www.seattle.gov/dpd/about or from our Public Resource Center, (206) 684-8467.

## **Subsequent Transmittals**

The minutes of the predesign meeting must be prepared by the applicant, and submitted to the DPD reviewer for review and written DPD approval. The minutes will remain in the Department records as reference throughout the permit process. The general notes of the building permit drawings are required to include a performance description of all subsections of Section 403.

#### **Items for Discussion at Conference**

The following list, which contains references to sections in the Seattle Building Code, is meant to help itemize specific areas which will be discussed during the conference. Applicants need to go through Section 403 or 404 section by section and document compliance.

#### **Exiting**

- 1. Show adequate separation of exits or exit access doorways. (Section 1014.2.1)
- 2. Show adequate exit termination. (Section 1019.1.8.1)
- 3. Show conformance to the restrictions for exiting through the atrium for buildings with an atrium. (Section 404.8)
- 4. Indicate proper function of stair-to-building door security lock system which will allow:
  - a. re-entry into the building from the stair at any level during a fire emergency. (Section 403.12)
  - b. people in the stair to communicate with an approved emergency service at five floor intervals at all times without the emergency condition. (Section 403.12.1)
- 5. Discuss any other door that is in the required path of egress that is intended to be locked under special egress control regulation. (Section 1003.3.1.10)
- 6. Show stair enclosure termination plan at the roof (required for all stairs). (Section 403.12.2)

- 7. Acknowledge signing requirements of Sections 403.16.3 and 403.16.4 and commit to include signage details in regard to building permit drawing submittal.
- 8. Show public corridor layout requirements for multitenant floors. Determine when a public corridor will be required to wrap around a core. The future submitted permit drawings must conceptually include this information.

#### **Exterior Walls**

- 1. Show distance to private property lines and indicate proper wall protection. (Table 602)
- 2. Indicate an awareness of safing required at the intersection of the floor and exterior walls and provide details under permit application. (Section 717.2.3)

#### **Elevators**

- 1. Determine designated main recall floor.
- 2. Determine alternate recall floor.
- 3. Determine the owner's numbering system for elevators. Section 3011 for elevator number designations. See Section 403.16.1 or elevator lobby signage.
- 4. Show pressurization, ventilation, and smoke control of elevator hoistways. See Section 3004.1 and 909 for shaft pressurization levels. See Section 3006.2 for ventilation of machine rooms.
- 5. Show elevator central control station and smoke detector by-pass indicator (Section 3018.2). Duplicate Phase I recall switches may be reduced to one Phase I recall switch per group of elevators.
- 6. Show elevators operating on emergency power. (Section 3017)
- Show the number of elevators in a single hoistway. (Section 3016.7). Four are allowed only under specific conditions. See Section 403.9 for buildings with stories more than 160 feet above the fire department access.
- 8. Elevator entrances and doors with gasketing have not been approved by testing laboratories for smoke control. (Sections 715.3 and 909.20).
  - Additions or modifications to entrances or doors will require approval or labeling by a testing laboratory before they will be acceptable.

#### Structural Fire Protection

Describe any unique problems with the required fire resistive values of the structural components to the building.

#### **Smoke Control System**

Indicate which of the following applies:

- 1. Describe the mechanical smoke removal system if used for high-rise structures.
- 2. Describe optional operable or break glass window system for high-rise structures. See Code Alternate CA909.
- 3. Describe the smoke control systems conforming to or meeting the intent of Sections 404.4 and 909 for buildings with an atrium.

## **Alarm and Communication Systems**

- 1. Provide a detailed description of the performance of all equipment listed under Section 403.6.
- 2. Show location and size of the central control station (Section 403.8)

# Standby Power, Light, and Emergency Systems

(Refer to UBC Standard 18-1)

- Describe the standby power system required by Section 404.6 for buildings with an atrium and Section 403.10 for high-rise structures. Include size, location and type of generator and required equipment it powers.
- 2. Indicate emergency system provided for:
  - a. exit signs and illumination.
  - b. elevator car lighting.
  - c. fire alarm and smoke control systems. See Section 909 and Section 403.11.1.
- 3. Submit an emergency operational plan, which will be approved prior to issuance of a Certificate of Occupancy. (Section 403.15)
- 4. For fuel tanks, see Director's Rule 8-2005 for requirements.

#### **Standpipes and Connections**

- 1. Indicate the size, type and location of all standpipes.
- 2. Provide dual hose connections at standpipes at each floor. (Section 905.3.7)

#### Seismic Anchorage

Indicate how the design team is going to coordinate the submittal of life safety equipment seismic anchorage details. Structural engineer's seal and signature required. (Section 1614.1)

#### **Barrier Free (Chapter 11)**

- 1. Show conformance to barrier free access at main building entrances and to all amenity spaces within the building, and at barrier free dwelling units.
- 2. Show location of barrier free parking stalls.

#### Mechanical

- 1. Provide a description of a building HVAC system.
- 2. Describe the elevator and stair pressurization system, including location of intake, exhaust, and fans. Two-hour separation required from the building. (Section 909.20)
- 3. Discuss pressurization of other shafts greater than 75 feet in height, but not the full building height.
- 4. Describe location and number of fans.
- 5. Describe any system that supplies air to or from required one-hour corridor spaces.
- 6. Describe the exhaust system for any Type I cooking hood anticipated in the project. Include fire separations and termination locations.
- Describe the mechanical system for any electrical vault including supply and exhaust, fire separations, and locations. Describe vault gravity vent to exterior.

## **Access to Information**

Links to electronic versions of DPD publications are available on the "Publications" page of our website at **www.seattle.gov/dpd.** Paper copies are available from our Public Resource Center, located on the 20th floor of Seattle Municipal Tower at 700 Fifth Ave. in downtown Seattle, (206) 684-8467.